

## MINES, MINING, LOCAL STOCKS AND COPPER

Future of the Metal  
Market Appears Rosy  
To Copper Producers

With the Price of Copper Steadily Going Up, Many Authorities Are Predicting That It Will Soon Be Above Thirty Cents—Production in Every Big Camp At a High Mark With Indications That Every Effort Will Be Bent to Increase Same.

Promotions in the State of Arizona Are Many and Are Taking Great amounts of Money for Development Purposes—Every Section Has Its New Companies, and Bisbee Appears to Be Last, But Not Least, to Bid for the Gamblers' Luck.

With the price of metal gradually mounting and indications pointing to still further advance, there appears little cause for worry in the big producing camps of the county and surely no cause for anxiety in promotion circles where there appears to be a golden harvest; some of which is being planted in the ground and, probably, some being planted in the historical piece of footwear.

Production at every camp in the country is on an immense scale and, instead of decreasing, is rising. Word from Anaconda, from Bingham, from Jerome, Globe and Ray and the many other copper centers, as well as from the Warren District and from Cananea, points to a record production for the month of October.

Inspiration, at Miami, for October produced nearly 12,000,000 pounds, Utah Copper about 21,000,000 and there are promises that with an increased capacity which will soon be in operation this amount will be greatly increased. The Copper Queen smelter, last month produced 16,000,000 pounds, the Calumet and Arizona 8,000,000 pounds and the Cananea Consolidated 6,000,000.

The natural question is, 'how long will it last?' Men of brains and ability in the east, the sellers and markets of American products both at home and abroad appear to be figuring on at least eighteen months more of the European war. In some quarters it is estimated that it will not have been concluded inside of two years. Copper must be had for many uses and with prosperity in the United States it must follow that copper will go more and more into domestic uses than ever before.

J. P. Morgan and Company is now floating a \$300,000,000 bond issue for the allied governments which assures the success of the promotion. Russia may be loaned another hundred million. All of this money, \$400,000,000 will be spent in America for products made in the United States. Wages have been increased, the worker and the capitalist is affluent and each demands more of the necessities and more of the luxuries of life. Copper, most certainly, will not suffer in these wants.

It is very probable, judging from tabulations of exports of copper that the metal is more and more entering into the general channels of domestic trade than at any time in many years. Every industry is demanding the metal. Electric supply companies, wire manufacturers of copper, machinery builders and a myriad of other factories demand and need copper. The market is overbid and the remarkable feature is the fact that the red metal is not now selling far above thirty cents. But for the organization of the producers in the country it is very possible that such would be the case.

## ON PROMOTIONS.

It would be interesting if some statistician, with a nack for hard work and investigation, could compile a table showing the number of new flotations and the amount of money which the public has contributed to them.

In Arizona, alone, this sum would reach into many millions.

Among Jerome, Oatman, Pinal County, the Ajo region, Miami, Globe, and now Greenlee county, the amount of money which has been subscribed for the development of copper properties and more is going to be subscribed. Some, of course, will make good. Others may and will fail. In the aggregate, however, the period will be one to look back upon as the greatest from a point of mine development that the Southwest and particularly Arizona, has ever experienced. Some people, of course, will have nicely printed certificates of stock which they may use to paper their woodsheds with. Others will be able to rest on the fruits of their good fortune and think back upon the largesse of Arizona's wonderland of undeveloped resources.

## THE WARREN DISTRICT.

What was forecasted some months ago by the Review will soon be seen; namely, a period of development outside of the known copper region of the Warren District. Three companies are about to operate. The Louisiana-Arizona Copper Company has purchased claims in Tombstone Canyon and soon will have stock for sale. It is understood the backers are Texas bankers and local men. Then there is the Bisbee Copper Mining and Development Company and the organization, of which little is as yet known, which will soon undertake to develop about 1200 acres of mineral land west and southwest of the Wolverine and White Tail Deer country. It is possible that something big awaits their prospecting of the ground at considerable depth.

## MUCH WORK GOING ON.

Though the local mines have a limit of production—the smelter and refining capacity—they are making lots of copper and are developing an immense tonnage of ore. Their progress in shafts and in ground which, heretofore, has been unproductive is one of the many bright spots in present day mining history in the camp. White Tail Deer, Dallas, Wolverine leasers and several other finds would increase the faith of the local man in the future of the District many times should they be counted in detail.

## ON THE FUTURE.

Adams, the New York correspondent of the Boston News Bureau, writing under the headline of Pithy Personalities, has the following to say of the management of Phelps, Dodge Company and of John D. Ryan, of Anaconda: "James Douglas, president of Phelps, Dodge & Co., and 78 years young, but ill, is one of the captains of industry who have sons upon whom they can depend in time of need. Walter Douglas is temporarily taking the place of the elder. Like all the Phelps-Dodge people he looks for continued strength in the copper metal market. Copper has astonished the world by advancing to heights undreamed of before the Hollenzollers sent forth their ultimatum." (Continued on Page 8)

BOOM PROMISED  
RAY IN NEAR  
FUTURE

Mining Expert Visits Pinal County Metropolis and Predicts that Boom Will Soon Strike the Region.

RAY, Arizona, Nov. 11.—That the copper camp at Ray, Arizona, is on the verge of a genuine "boom" is the opinion expressed by H. E. Davis, field mining expert for the non-promotion brokerage house of A. W. Coote, in Los Angeles. Mr. Davis has just completed a personal investigation of the central zone of the Ray district, for Mr. Coote, and during his stay in the district made a close study of general conditions. He is one of the most conservative and careful mine investigators in the southwest, and has for years been a constant contributor to a number of the most influential mining and technical publications in the United States. Relative to Ray, Mr. Davis says, in part:

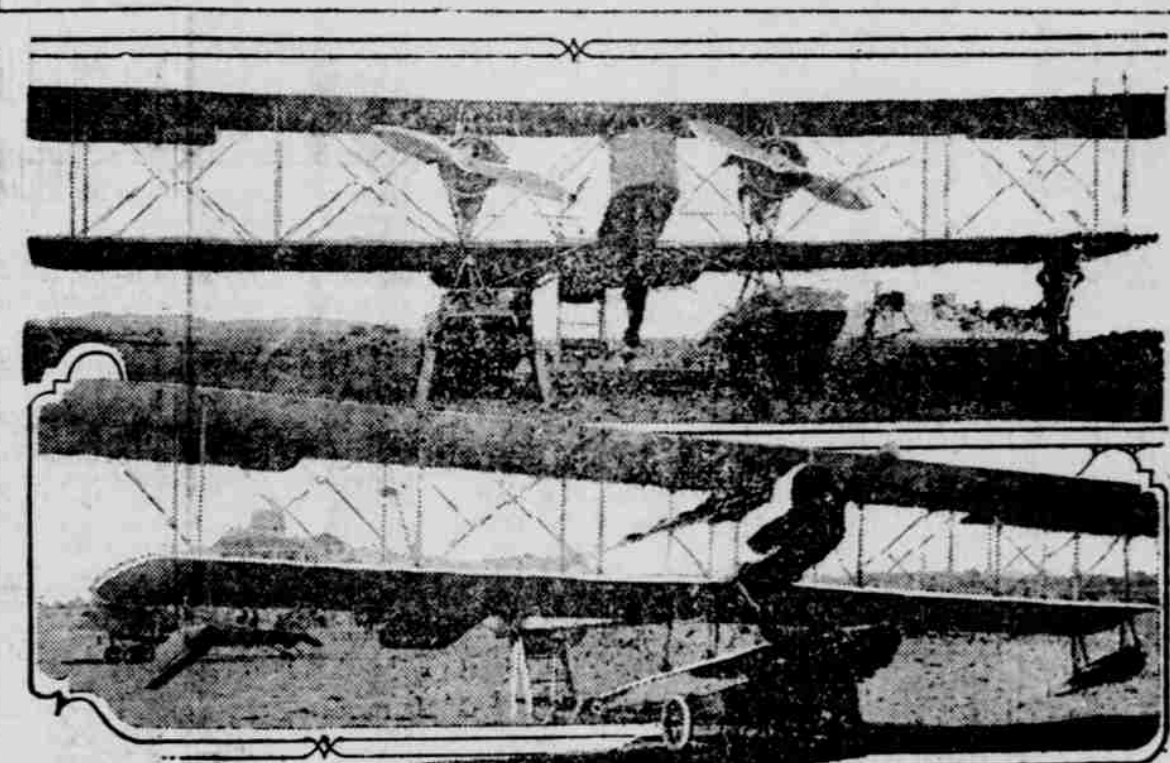
"I have seen many new mining camps in the making, and must say that while Ray is by no means a new camp, it is showing unmistakable signs of a boom, which should not be long in coming. The enormous production of the Ray Consolidated has long kept the name of the camp before the public, and with the Ray Hercules planning to enter the ranks of the big producers in the near future, and other companies starting active development, the district is daily receiving more attention.

"Ray Consolidated is a great mine, and bids fair to continue to be a great mine for a long time to come. I was particularly impressed by the machine-like precision of all operations conducted by this big company, by the excellence of all its mining equipment, the permanence of construction of all buildings, and the care which is being taken of its employees. Nowhere could I see signs of lost motion. Its 10,100 men are daily working with less confusion than is shown by many companies handling less than 25 tons per day, all operations running as smoothly as a high-priced chronometer. The ore reserves of the company are almost incredible.

"Ray Hercules is a property which seems to be somewhat underrated. The company is reticent about giving out information, and while some figures have been given out which estimate 3,000,000 to 4,000,000 tons of ore in sight, the general impression among Ray mining men is that it has much more than 10,000,000 tons in sight, some of which is very high grade ore. The main working shaft, No. 1, is now down about 700 feet, and has cut through some 400 feet of highly oxidized schistose matter containing material, every small piece, when broken, showing the fluid foliation zones to contain sheets of native copper, some of which are not much thicker than gold leaf. In other places the copper is more massive, and the sheets are fully an eighth of an inch in thickness. Very little is being said about this rich find, and there is some belief in Ray that the 'insiders' are quietly purchasing all the stock they can secure at prevailing and without unduly exciting the market.

Arizona Ray is another company which is attracting attention. Its consulting engineer and manager, is Edmund Hiatt, for six years chief engineer of the Ray Consolidated, and who played a large part in its development. Under his direction a churn drill is now working in a portion of this ground, but about 500 feet from where the Ray Consolidated is extracting very rich carbonate ore from its famous claim. The shaft is now down about 165 feet. The dactile capping had been penetrated, and when I was on the ground the drill was in the conglomerate which usually lies between the dactile and the schist. The schist is the principal ore-bearing rock of the district. The Calumet workings are practically due north of the drill-rig of the Arizona Ray, and the ore-bearing schist throughout this section is in blanket formation, extending north and south, and dripping down ward toward the east, generally speaking. The drill hole is in a practically direct line with the Calumet slopes to the north, and the northern drill holes put down by the Ray Hercules. Its central block of ground is surrounded on three sides by the proved territory of the Ray Hercules and Ray Consolidated. The drill-rig is operating near the extreme western end, and as the dip of the bedding plane of the schist is toward the east, and pay ore has been developed still to the east of the Ray Consolidated, it appears as though the company has a splendid prospect of developing pay copper underneath this entire block of ground, which covers about three claims. The total acreage of its holding is 170. Another churn drill outfit will soon be in operation. In the meantime, directly south of its ground the Ray Hercules is steadily operating four churn drills. There is much activity along this entire range from near Geronimo, some sixty miles to the southeast, to Superstition. (Continued on Page Six)

## UNCLE SAM TO STRENGTHEN NAVY WITH POWERFUL NEW AEROS



The aerial tractor J N (top) and the hydroplane N 9.

The naval aeronautical board has accepted the model known as N 9, a 100-horsepower single-pontoon hydroplane, as the first of thirty machines to be built by the Curtiss company near Newport News, Va. Minor modifications will be made in the other twenty-nine machines. The navy has also approved the J N, a Curtiss aerial tractor of the twin-pontoon, twin-engine type. It develops 200-horsepower.

VERDE EXTENSION  
DENIES KINGDON  
IS NEW MANAGER

JEROME, Nov. 11.—George Kingdon is not to be superintendent of the Verde Extension and there is ore in the bottom of the new winze, 200 feet below the 1400-foot level.

These important statements were made this week by President James S. Douglas upon his arrival from the southern part of the state. He expects to remain at the property some time.

President Douglas admitted himself wholly at a loss to understand the origin of the story, published as a fact nearly everywhere in the country except Jerome, that George Kingdon, superintendent of the Cananea Consolidated and one of the highest-priced men in the industry, was to succeed Dave Morgan in charge of operations at the Extension. "There never has been any foundation for the story," he declared.

No successor to Mr. Morgan, whose contract took effect November 1, has been selected, according to Mr. Douglas. For the present Dick Kingdon, a brother of George Kingdon and long Mr. Morgan's right-hand man, will be in charge at the Extension.

The winze, started 1000 feet south of the Edith shaft on the 1400, has been sunk to 200 feet. Its contemplated depth, and work therein has ceased. This winze was in ore down to the 1500 and for the next 60 feet it passed through a horse foot rock.

"The horse means nothing," remarked Mr. Douglas. "There are such occurrences in almost every ore body. There is ore in the bottom of the winze."

"Is the bottom all in ore?" "Not entirely."

"But indications point to solid ore on all sides."

"I am confident that such is the case."

No start has been made on the new hoisting shaft, to be sunk 200 feet east of the Edith, but President Douglas hopes that it can be completed soon. There has been some delay in getting the shaft started, but the delay is not serious.

Shipments of ore from the Extension vary from day to day. They depend entirely upon the number of freight cars that can be secured. Some days as many as eight carloads of ore averaging above sixteen per cent copper are shipped to the Humboldt, Old Dominion, C. & A. and Copper Queen smelters. Other days only five or six cars move forward.

President Douglas had no comments to make on the Extension smelter or on the proposed railroad from Clarkdale south through the Verde valley to Mesa, now being surveyed. He stated that the location of the smelter had not been determined.

With the dividend checks that will go out in a few days each stockholder will receive a short statement. Some important and startling facts and figures are likely to be included in the annual statement, to be issued about the first of next year.

Eastern authorities estimate the present ore reserves of the Extension at 1,518,000 tons.

GREEN MONSTER IS  
STILL TRYING TO  
BUY COPPER CHIEF

JEROME, Nov. 11.—Reports that the negotiations of the Green Monster company for control of the Copper Chief mine had been satisfactorily concluded, which first became current on Tuesday of this week, are flatly denied by local Green Monster officials. They deny that they have any assurances that the negotiations are trending toward a consummation, though all have hopes that the deal can be made. The details are in the hands of Will L. Clark, who is now in the east conferring with representatives of the English estate which controls the Copper Chief.

One story given wide circulation was that Leroy Anderson, attorney for the Green Monster company, had wired out from Prescott the news that the deal had been concluded. Mr. Anderson, President Neil Bailey and Managing Director W. S. Humbert all say that there is nothing in the story. Evidently, however, there is a wide belief in the east that the Green Monster-Copper Chief deal has been consummated or is on the point of consummation. There is no other explanation for the advance in Green Monster stock from around \$4 to nearly \$7 a share.

It is understood that if the deal is made the Green Monster company will offer 300,000 shares of stock on the market around \$7 a share or perhaps higher. This will place the company in an unusually strong financial position, for it already has something like \$350,000 in the treasury. The proposed purchase price of the Copper Chief is around \$1,250,000.

Moreover, the Green Monster company will then be the owner of a producing mine as well as of its present acreage with its undoubted possibilities. Few persons know just how good the Copper Chief is. Recently a body of 1000 copper and gold ore was struck on the 250-foot level. A drift has been run in this ore for 70 feet. No crosscut has been run so the width of the body is not known. This gives the Copper Chief a much greater value than it had a few months ago.

The Copper Chief cyanide mill is treating some 120 tons of ore a day. A conservative estimate places its monthly gold and silver recovery at \$8,000, but the actual figures are probably much greater. Estimates of the value of the ore blocked out run as high as \$6,000,000.

If the Green Monster company does take over the Copper Chief, Will L. Clark, who recently resigned as manager of the United Verde, will be in charge there for a time at least. More attention will be paid to marketing the copper ore. Near the surface the values are chiefly gold but the copper values increase with depth.

## WILSON 3278 AHEAD

SAN FRANCISCO, Nov. 11.—At midnight with 17 precincts missing out of 5,870 in California the vote for president stood: Hughes, 462,828; Wilson, 466,106. Wilson's plurality, 3,278.

VERDE COMBINATION  
MAKING PLANS FOR  
BIG DEVELOPMENT

JEROME, Nov. 11.—About a dozen men are now working on the Verde Combination property. They are repairing the buildings, overhauling machinery and otherwise making preliminary preparations for the development work that will be under way in the course of a week or ten days.

Superintendent Dave Morgan will probably be in personal charge on the Combination ground tomorrow. His contract with the Combination began on November 1 but it became necessary for him to remain at the U. V. Extension several days longer than he expected.

No detailed plans for developing the various groups included in the Combination can be announced till after Morgan goes over the ground thoroughly and completes his plans. It is known, however, that the 1400-foot tunnel on the Moscal is to be driven forward with all possible speed. Eight hundred feet in from the portal this tunnel passes through a five-foot vein of sulphide ore.

The machinery on the Black Hills group is to be used for the present. It is expected that little time will be lost in unwatering the Black Hills shaft, which is down 670 feet. According to an old report in the possession of the Combination officers, this shaft cut nine feet of sulphide at 630 feet. On the dump there is some beautiful ore said to have come from this shaft.

There are numerous outcrops on the Combination property that carry peacock copper and sulphides right on the surface.

DIAMOND DRILLS TO  
EXPLORE THE GROUND  
FOR THE U. V. CON. CO.

Consulting Engineer George A. Bethune has returned from a trip over the United Verde Consolidated group of claims near Jerome and brought with him several fine specimens of iron stained quartz showing heavy in copper. Mr. Bethune states that where the quartz came to the surface, that the diorite was highly silicified and of a schistose character.

This find will undoubtedly be made the starting point for the first hole to be made by the Diamond Drills on the property and men are continually being kept at work prospecting the ground. Mr. Bethune further states that he expects as fine a grade of ore will be obtained from this drilling, as is being mined in the district.

He also reports that several men and teams will be put at work immediately, to level up the road leading from the main traveled county road direct to the main camp on the company's property, which road is a continuation of the high line road into the adjoining properties of the Copper Chief and Green Monster claims. This road when repaired will make a splendid thoroughfare.

YAVAPAI THE  
MECCA FOR  
MINING  
MEN

Present Boom in the Northern County Not Been Equaled Since the Golden Days of Mohawk in Goldfield, Nev.

INTEREST CENTERED  
IN JEROME DISTRICT

United Verde Extension Holds a Similar Position in Arizona to What Mohawk Did to Esmeralda County, Nev.

(By William P. De Wolf)

PRESIDENT, Arizona, Nov. 11.—Developing mineral wealth and making mining history to an accompaniment of sensational incident such as has had no counterpart since the golden riches of the Mohawk mine at Goldfield, were first unearthed, is the daily occupation of the mining men of Yavapai county. At Goldfield a single string—gold—drew the mine makers of yesterday to the treasure caches of Columbia mountain and vicinity. In Yavapai county a half-dozen strings—copper, gold, silver, tungsten lead and zinc—are drawing the mine makers of today and tomorrow to a section of unsurpassed mineral wealth.

The Crown King, Copper Basin, Tip Top, Weaver, Camp Wood, Big Bug, Lynx Creek, McCabe, Verde, Congress, Hassayampa and other districts each have a pull of their own, and back of that pull is the mineral wealth of a county having few equals as a mining proposition—a county that stands squarely in the spotlight of mining interest and commands the cream of mining investment.

## Little Daisy vs Mohawk

The "Little Daisy" (United Verde Extension) mine in the Verde district, occupies a position in the mining affairs of Yavapai county relatively similar to that held by the Mohawk mine in the affairs of Esmeralda county, Nevada. That is to say—in the vernacular—the Little Daisy is as strong a "soda" card to play in the mining game as was formerly the Mohawk. You can "copper" that bet all the way through the deal and win every turn out of the box; for the Little Daisy is probably the richest copper mine in the world. As did the Mohawk, as a producer of high grade gold ore, so does the Little Daisy, as a producer of high grade copper ore, stand in a class by itself.

The strike of some months ago in the Little Daisy mine is doing for the Verde district what the strike of a decade ago in the Mohawk mine did for the Goldfield district. As with Mohawk stock, so with Little Daisy stock, there was a time when it went begging. As it rested with the Mohawk to point the way to the bonanza gold ore deposits of the Goldfield district, so it rested with the Little Daisy to point the way to the bonanza copper ore deposits of the Verde district. As the Mohawk indicated to the mining world the great money making opportunities of the Goldfield district, so the Little Daisy has demonstrated similar opportunities in the Verde district. Millions of dollars are now available for the development of the rich gold zone at Goldfield following the Mohawk strike.

## Interest is Increasing

The rapid and marked advance in the price of United Verde Extension (Little Daisy) shares, has electrified the investment world. A few years ago they were without price. Less than two years ago they were selling at 40 cents per share. Today they are selling at \$40 per share and upward. United Verde Extension has established a market for the entire list of Verde district coppers. The demand for them is increasing and their prices are advancing in the face of new promotions and of profit-taking. A feature of this demand is the avidity with which the local public is buying the shares, and often to the exclusion of the outside public. It is (Continued on Page 8)